

MAY 9.

The President, Dr. RUSCHIENBERGER, in the chair.

Twenty-four members present.

The following paper was offered for publication:—

“Notes on the Natural History of Fort Macon. No. 2.” By ELLIOTT COUES.

PROF. LEIDY said that he had just received, from its author, Mr. Mason, a copy of an abstract from the proceedings of the Asiatic Society of Bengal, for June, 1871, giving an account of a case of polydactylism in a horse from Bagdad. In this case the usual “splint-like rudiments of the metacarpals of the fourth toe in the fore feet had given rise to an additional toe provided with three phalanges, of which the last is incased in a hoof.” A preparation of the foot of a horse, preserved in the Museum of the University of Pennsylvania, exhibits a similar condition. The abnormally developed metacarpal has the toe with two phalanges, of which the last is inclosed in an irregular hoof. If there were a corresponding development of the metacarpal on the other side of the preparation, the foot would represent the normal condition of the tertiary horse *Hipparion*. If both outer toes were still better developed in relation with the intermediate one, the foot would represent the condition of the earlier tertiary horse *Anchitherium*.

PROF. COPE demonstrated some anatomical points of importance in the classification of some of the Siluroids of the Amazon, noticing first those which have no swimming-bladder, but having the post-temporal bone pierced in a sieve-like manner, forming minute tympana; these he characterized as “*Otocinclus*.”

Others having huge swim-bladders, gun-boat style of shape. No adipose fin; the back naked. No lyre plate; indicated as “*Zathorax*.”

A 3d, body protected by bony shields above. No adipose fin; the scapular arch dermoössified and lyre-shaped below; indicated as “*Physopyxis lyra*.”

A 4th, shielded all over its sides, with the under lip turned back, genus “*Corydoras*.”

A 5th, where the under lip is separated, except at the ends, forming loops, named “*Brochis*.”

In the 6th, where the lips are separated from the beard distally forming chin beards, indicated as “*Dianema*.”

LIEUTENANT DUTTON remarked that the persistence and constancy of specific characters, while generic features were undergoing change, was admirably illustrated in some of the genera of Brachiopoda in the Silurian and Devonian. These genera are
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very numerous and very abundant in species, and seem to exemplify the views of Prof. Cope in a remarkable manner. Take, for instance, the *Orthis* family, one of the most common and prolific both in respect to individuals and species. In this family are five or six well-marked genera, and yet the specific characters, so far as they are discernible in the hard parts, are often quite identical in species of different genera; and though they have often varied, yet sufficient constancy is maintained to deceive any careless investigator, and to give the idea of specific identity. It is fairly to be inferred from a study of this class of fossils that generic and perhaps higher characters may change very rapidly, while specific ones are changing but slowly, nor remaining constant.

MAY 16.

Dr. CARSON, Vice-President, in the chair.

Twenty-three members present.

Remains of Mastodon and Horse in North Carolina.—PROF. LEIDY exhibited two photographs, received from Prof. W. C. Kerr, State Geologist of North Carolina, representing some remains of *Mastodon americanus* found in that State. One of the specimens represented is that of the greater part of the lower jaw of a mature male, retaining both incisor tusks and the last two molar teeth. The latter, with their angular lobes separated by deep angular and nearly unobstructed valleys, are quite characteristic of the species. The incisors are an inch and three-fourths in diameter. The last molar has four transverse pairs of lobes and a well-developed heel. The penultimate molar has three transverse pairs of lobes. The specimen was obtained from gravel overlying the miocene marl near Goldsboro', Lenoir Co., N. C. An isolated last lower molar of the same species, represented in company with the jaw, was obtained in Pitt Co.

PROF. LEIDY also exhibited a specimen of an upper molar tooth, which Mr. Timothy Conrad had picked up from a pile of miocene marl at Greenville, Pitt Co., N. C. He suspected, from its size and intricacy in the folding of the enamel of the islets at the middle of the triturating surface, that the tooth belonged to the post-pliocene *Equus complicatus*, and was an accidental occupant of the miocene marl. It may, however, belong to a *Hipparion* of the miocene period, but the imperfection of the specimen at its inner part prevented its positive generic determination.

Remains of Extinct Mammals from Wyoming.—PROF. LEIDY then directed attention to what he regarded as one of the most remarkable fossils which had yet been discovered in our western
1871.]